

THE GENERA OF THE OSORIINAE  
OF AMERICA NORTH OF MEXICO  
(COLEOPTERA: STAPHYLINIDAE)

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ABSTRACT

A generic summary (morphology and distribution) is presented for the following 3 genera of Osoriinae: *Osorius*, *Neotrochus*, and *Fenderia*.

The subfamily Osoriinae, treated here in the restricted sense suggested by Moore (1964), may be briefly characterized as follows: antennae inserted at side margins of head; first segment of maxillary palpi not more than one-third longer than second; last segment of maxillary palpi not arcuate; abdomen without paratergites; anterior coxae large, elongate, with a transverse or diagonal sulcus on anterior face.

Members of this subfamily are usually cylindrical in form. Many species are found in the sandy margins of streams, but some inhabit rotting wood, and others are found in leaf litter. The subfamily is extensively represented throughout the tropics, but a few species are indigenous to the warmer areas of the United States and other temperate zones.

KEY TO THE GENERA OF OSORIINAE  
OF AMERICA NORTH OF MEXICO

1. Anterior tibiae much enlarged, strongly spinose ..... *Osorius* Latreille
- 1'. Anterior tibiae not enlarged, not spinose ..... 2
- 2(1'). Last segment of maxillary palpus not narrower than penultimate; labrum truncate, not dentate ..... *Neotrochus* Blackwelder
- 2'. Last segment of maxillary palpus much narrower than penultimate; labrum rounded, dentate ..... *Fenderia* Hatch

*Osorius* Latreille

Latreille 1829:438; Erichson 1839:30, 1840:753; LeConte 1861:69; LeConte & Horn 1883:102; Blatchley 1910:473; Notman 1925:3; Bradley 1930:67; Arnett 1961:242. Synonym: *Melosoma* Say 1830:49. Type: *braziliensis* Guerin-Meneville. Key: Notman 1925:6.

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**Form:** cylindrical, robust; integuments shining.

**Head:** large, cylindrical. Eyes small, often not interrupting the side margin of the head. Antennae short, incrassate, somewhat geniculate; first segment as long as the next 4 or 5 together; their fossae located well in front of the eyes beneath a distinct ridge. Mandibles very stout, pointed. Labrum transverse, widest at base, apex truncate with the angles rounded. Paraglossae very long, prominent, comb-like, protruding well beyond the apex of the labrum. Maxillary palpi 4-segmented; first segment short; second elongate, curved, widest at apex; third as wide as apex of second, transverse; fourth as wide as third, twice as long as wide, pointed. Inner lobe of maxilla slender, pointed, ciliate; outer lobe broad, truncate with an apical pointed process and a few apical setae. Labial palpi 3-segmented; first segment widest, transverse; second and third of equal width and length, each about twice as long as wide; third narrowed to apex. Ligula rounded, simple. Gular sutures united. Infraorbital carina lacking.

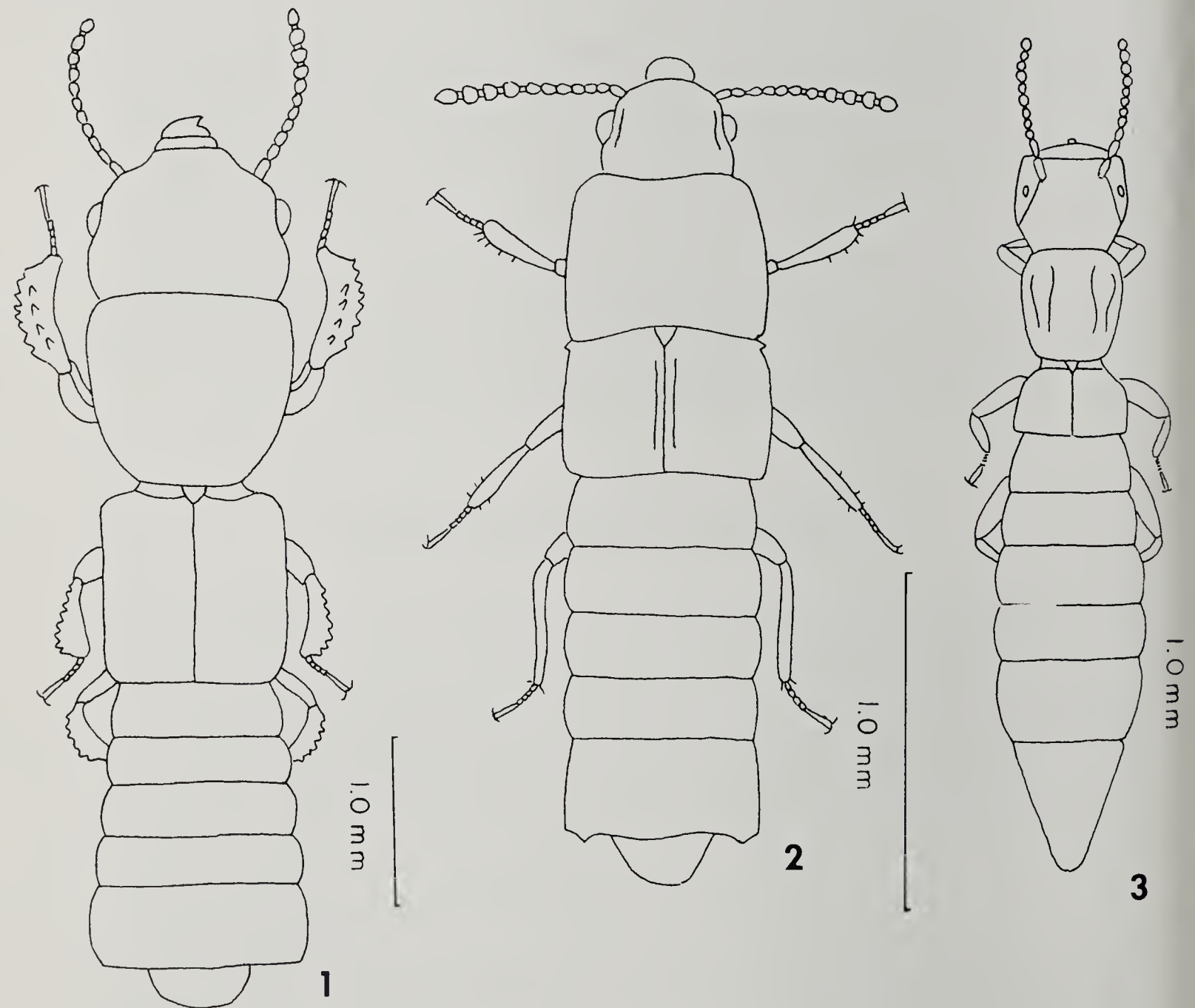


Fig. 1-3. Genera of Osoriinae: 1) *Osorius latipes* Erichson; 2) *Neotrochus* sp.; 3) *Fenderia capizzii* Hatch.



**Thorax:** cylindrical; pronotum usually widest at apex. Prosternum moderate, medially strongly tumid, its process pointed and extending a short distance between the coxae. Lateral prosternal suture obliterated. Hypomera delimited by a carina. Trochantin small, triangular. Epimera not delimited by a suture. Mesosternum short, its process long, narrow, pointed, carinate, extending about halfway between the coxae. Metasternum elongate, its process very short, pointed. Elytra quadrate, epipleura delimited by a carina. Scutellum large. Anterior coxae very large, rectangular, exserted, with a diagonal sulcus on the anterior face, contiguous. Middle coxae large, exserted, contiguous. Posterior coxae transverse, contiguous. Tibiae greatly expanded, with many large spines and setae. Tarsi 5-segmented; first 4 segments short, with the first a little the longest; fifth longer than the first 5 together.

**Abdomen:** cylindrical, usually narrowed at base. Segments without paratergites. First visible segment with a small keel between the coxae.

**Distribution:** 9 species in this tropical genus are reported from the United States, 2 of which range into the northeastern states. Between 200-300 species have been placed in this genus. Except for 2 of our species, 1 from Japan, several from China, and 1 from Australia, the species are known only from the tropics and subtropics.

### *Neotrochus* Blackwelder

Blackwelder 1943:164; Arnett 1961:242. Synonym: *Holotrochus* Chapin 1928:65 (not Erichson 1839). Key: Chapin 1928:65.

**Form:** subcylindrical; integuments shining, foreparts without pubescence.

**Head:** not constricted behind to form a neck; a short, longitudinal carina over each eye. Eyes moderate, not very prominent. Antennae somewhat incrassate, first segment as long as the next 3 together, their fossae located well in front of the eyes under a distinct ridge. Mandibles stout, pointed, each with 2 internal teeth. Labrum transverse, the apex truncate, the angles rounded. Maxillary palpi 4-segmented; first segment small; second about as long as wide, widest at apex; third as wide as apex of second, transverse; fourth as wide as third, a little longer than second and third together, pointed. Inner lobe of maxilla narrow, bifid at apex; outer lobe broad, ciliate at apex. Labial palpi 3-segmented, segments of about equal width, first and third segments about 3 times as long as wide; second segment ball-shaped; third pointed. Ligula transverse, a little produced in the center of the apex. Gular sutures united. Infraorbital carina absent.

**Thorax:** pronotum quadrate, the sides subparallel; the base a little emarginate. Prosternum large, with a prominent pointed tumidity just anterior to its process, which is pointed and extends slightly between the coxae. Lateral prosternal sutures obliterated. Hypomera delimited by a carina. Trochantin large, oval. Epimera not delimited by a suture. Mesosternum short, its process long, narrow, pointed carinate, extending two-thirds of the way between the coxae. Metasternum long, its process pointed, extending one-third of the way between the coxae where it meets the mesosternal process. Elytra quadrate; the humeral angle with a small tooth; the sutural striae subparallel; the epipleura delimited by a carina. Scutellum large. Anterior coxae large, exserted, contiguous, with a diagonal sulcus on the anterior face. Middle coxae large, round, narrowly separated. Posterior coxae

transverse and somewhat triangular. Tibiae not much expanded, with a few small setae. Tarsi 5-segmented, the first 4 segments short, the fifth about as long as the first 4 together.

**Abdomen:** cylindrical, without paratergites; first visible segment with a small keel between the coxae.

**Distribution:** this is a small tropical genus with a few species extending into temperate areas. They are found under the bark of trees. The above description was taken from a Brazilian species, as we have seen no North American material in this genus.

### *Fenderia* Hatch

Hatch 1957:245; Arnett 1961:242. Type: *capizzii* Hatch.

**Form:** minute, cylindrical, elongate, integuments shining.

**Head:** large, orbicular, narrowed behind to form a distinct but broad neck. Antennae with the first 2 segments elongate, the rest round, with the eighth smaller than the seventh; their fossae located well in front of the eyes under a prominent ridge which is well back from the anterior margin of the head. Mandibles very long and slender, arcuate; the apex finely pointed, each with a long, slender, curved tooth internally. Labrum transverse, the apex with seven teeth, the center tooth the longest. Maxillary palpi 4-segmented; first segment short; second longer; third large, bulbous; fourth about as long as second, very slender, aciculate. Labial palpi 3-segmented; first segment large, elongate; second shorter; third very narrow, short. Ligula quadrate with a palpus-like appendage at each outer angle. Gular sutures united behind, divergent in front. Infraorbital carina absent.

**Thorax:** pronotum narrowed behind, with 2 irregular longitudinal impressions on each side of the disc. Prosternum large, its process short and pointed, hardly going between the coxae. Lateral prosternal suture distinct. Hypomera very broad, delimited by a carina. Trochantin minute or absent. Epimera not delimited by a suture. Mesosternum moderate, its process very long, acute, carinate, extending all the way between the coxae. Metasternum moderate, its process very short, pointed, meeting the mesosternal process. Elytra small; epipleura delimited by a carina, almost as large as disc of elytra. Scutellum small. Anterior coxae exserted, contiguous, with a diagonal sulcus on the anterior face. Middle coxae exserted, separated. Posterior coxae exserted, contiguous. Tibiae without spines. Tarsi 5-segmented; first 4 segments short, last not quite as long as first 4 together.

**Abdomen:** cylindrical, without paratergites. First segment with a small keel between the coxae. First five segments constricted basally.

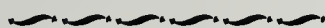
**Distribution:** There is a single known species found in litter under redwood and other coniferous trees in the northwestern United States.

**Notes.** The very long falcate mandibles are quite remarkable in this group. Their points of articulation are so far apart as to give the head an unusual appearance. In most other regards, this genus is similar to other members of this subfamily.



## LITERATURE CITED

- ARNETT, R. H., JR. 1961. Staphylinidae *In* The beetles of the United States (A manual for identification) part II, fasc. 15:233-310. Catholic University Press, Washington, D.C.
- BLACKWELDER, R. E. 1943. Monograph of the West Indian beetles of the family Staphylinidae. Bull. U.S. Nat. Mus. 182:1-658.
- BLATCHLEY, W. S. 1910. The Coleoptera or beetles (exclusive of the Rhynchophora) known to occur in Indiana with bibliography and description of new species. Indiana Dept. Geol. & Nat. Res., Bull. 1:1-1386.
- BRADLEY, J. C. 1930. A manual of the genera of beetles of America North of Mexico. 360 p. Ithaca, N.Y.
- CHAPIN, E. A. 1928. The North American species of *Holotrochus* Erichson (Coleoptera: Staphylinidae) with Descriptions of Two New Species. Proc. Entomol. Soc. Wash. 30:65-67.
- ERICHSON, W. F. 1839. Genera et species staphylinorum insectorum coleopterorum familiae (pt. 1) p. 1-400, Berlin. 1840. Ibid. (pt. 2) p. 401-954. Berlin.
- HATCH, MELVILLE. 1957. The beetles of the Pacific-Northwest. Part II: Staphyliniformia. Univ. Washington Publ. Biol. 16:1-384.
- LATREILLE, P. A. 1829. Le règne animal . . . par M. LeBaron Cuvier . . . , Tome IV: crustacés, arachnides et partie des insectes. 584 p. Paris.
- LECONTE, J. L. 1863. New species of Coleoptera, pt. I. Smithsonian Misc. Coll. 26 (pt. 4) 507:1-567.
- MOORE, IAN. 1964. A new key to the subfamilies of the Nearctic Staphylinidae and notes on their classification. Coleopt. Bull. 18:83-91.
- NOTMAN, HOWARD. 1925. A synoptic review of the beetles of the tribe *Osoriini* from the Western Hemisphere. Proc. U.S. Nat. Mus. 67:1-34.
- SAY, THOMAS. 1830. Descriptions of new species of North American insects and observations on some of the species already described. Diss. Usef. Knowl.



*CAFIUS SULCICOLLIS* LECONTE FROM  
THE GULF OF CALIFORNIA  
(COLEOPTERA: STAPHYLINIDAE)

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Moore and Legner, 1973 (Pan-Pac. Ent. 49:279-280) gave speculations on the distribution of several species of *Cafius* in Baja California and reported *C. sulcicollis* LeConte from the Salton Sea. They said "It is unlikely that the species was introduced from the Gulf of California as no member of the genus is known from the northern part of the Gulf." We have recently seen 3 specimens of *C. sulcicollis* from Punta Chueca, (29.00°-112.05°) Sonora, Mexico, light trap on beach, 18-I-1974, Vincent Roth, and 44 specimens from Punta Cuevas, (29.42°-112.35°) Sonora, Mexico, crepuscular flight over intertidal zone, 24-25-IX-1973, Vincent Roth and W. Brown. It is possible that *C. sulcicollis* found its way to the Salton Sea from the Gulf of California.

